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ABSTRACT

5 A detection method for measuring lift guide rail perpendicularity and an apparatus for practicing the method. The detection method includes the following steps: selecting several monitoring points on a working surface of the lift under testing, measuring
10 seriatim the position coordinates of each monitoring point in the longitudinal direction of the guide rail and the distance between two adjacent monitoring points, measuring seriatim the included angle between the line connecting the two adjacent monitoring points and the plumb line (or the horizontal line), plotting a graphic chart of the perpendicularity error data to obtain the perpendicularity curve for the lift guide rail.

15 The apparatus includes an instrument frame, several detector heads, a displacement sensor, an inclination sensor, a microprocessor and a power supply unit installed on the instrument frame. The advantages of the present invention are: the detected data are picked up directly by the sensors and inputted into the microprocessor, and
20 analyzed and outputted by the microprocessor, so that automation and intellectualization of lift guide rail perpendicularity detection are achieved.